DETAILED DESCRIPTION OF THE INVENTION

We have now shown that monovalent ligand constructs interact with Hek with markedly different affinities, with LERK7/AL-1 being 50-fold more avid than LERK3. This suggests that these receptors do not show true redundancy, but rather use varying affinity for different, and--.

IN THE CLAIMS:

Please cancel Claims 38-39, and 42-43.

Please amend the remaining claims as follows:

1. **(Twice Amended)** An isolated **[ligand-binding domain of an Eph family RTK]**polypeptide which is capable of binding a LERK, said polypeptide consisting essentially of an amino acid sequence selected from the group consisting of:

an amino acid sequence encoded by exon II of an Eph receptor tyrosine kinase gene;

an amino acid sequence encoded by exon II and exon III of an Eph receptor tyrosine kinase gene; and

an amino acid sequence encoded by exon I, exon II, and exon III of an Eph receptor tyrosine kinase gene.

2. **(Twice Amended)** The isolated **[ligand-binding domain according to Claim 1, wherein the Eph-family RTK is an EphA3 RTK]**polypeptide of Claim 1 wherein said isolated polypeptide excludes the entire extracellular domain of an Eph Family receptor tyrosine kinase.

3. **(Twice Amended)** The isolated **[ligand-binding domain according to]**polypeptide of Claim 1, wherein **[said domain is capable of binding LERK7]**

the amino acid sequence encoded by exon III is SEQ ID NO:1.

4. **(Twice Amended)** **[An isolated ligand-binding domain of an Eph-family RTK which]**The isolated polypeptide of Claim 1 wherein said peptide has at least one pair of **[disulphide bond involving]**disulfide bonded cysteine residues **[corresponding to conserved cysteine residues in HEK wherein said disulphide-bonded cysteines are]** selected from the group consisting of:-

(i) Cys_{71}-Cys_{189};

(ii) Cys_{257}-Cys_{270};

(iii) Cys_{259}-Cys_{270};

(iv) Cys_{306}-Cys_{322}; and

(v) Cys_{362}-Cys_{365};

5. **(Thrice Amended)** An isolated **[ligand-binding domain of an Eph-family RTK comprising an amino acid sequence encoded by exon III of a gene encoding an Eph family RTK]**polypeptide which is capable of binding a LERK, said polypeptide consisting essentially of an amino acid sequence set forth in SEQ ID NO:4.

6. **(Thrice Amended)** The isolated **[ligand binding domain according to]**polypeptide of Claim 5, wherein **[the ligand-binding domain further comprises an amino acid sequence encoded by exon II of said gene]**said polypeptide excludes the entire extracellular domain of an Eph family receptor tyrosine kinase.

7. **(Twice Amended)** The **[isolated ligand-binding domain according to]**polypeptide of Claim **[6]**5, wherein **[said ligand-binding domain further comprises an amino acid sequence encoded by exon I of said gene]**the LERK is selected from the group consisting of LERK3, LERK4, LERK5, and LERK7.

8. **(Thrice Amended)** The **[isolated ligand-binding domain according to Claim 7, wherein exon I has a nucleotide sequence according to SEQ ID NO:6]**polypeptide of Claim 7, wherein the LERK is LERK7.

9. **(Thrice Amended)** An isolated **[ligand-binding domain of an Eph family RTK comprising an amino acid sequence encoded by a nucleotide sequence according to SEQ ID NO:5]**nucleic acid which encodes the polypeptide of Claim 5.

10. **(Thrice Amended)** **[An]**The isolated **[ligand-binding domain of an Eph family RTK comprising an amino acid sequence according to SEQ ID NO:1]**nucleic acid of Claim 9, wherein said nucleic acid consists essentially of SEQ ID NO:5.

11. **(Twice Amended)** An isolated **[peptide comprising a sub-sequence of a ligand-binding domain of an Eph family RTK]**nucleic acid which encodes the polypeptide of Claim 1.

12. **(Twice Amended)** **[An]**The isolated **[polypeptide homolog of a ligand-binding domain of an Eph family RTK]**nucleic acid of Claim 11, wherein said nucleic acid comprises SEQ ID NO:5.

20. **(Thrice Amended)** A recombinant polypeptide produced by a host cell wherein said recombinant polypeptide comprises **[said ligand-binding domain of]**the polypeptide of Claim 1.

~~35.~~ **(Amended)** The isolated **[ligand-binding domain according to]**polypeptide of Claim 1, wherein **[the EphA3 RTK is HEK]**Exon I has a nucleotide sequence according to SEQ ID NO:6.

~~36.~~ **(Amended)** **[An]**The isolated **[ligand-binding domain according to]**polypeptide of Claim **[5]** 1, wherein exon III has a nucleotide sequence according to SEQ ID NO:8.

~~37.~~ **(Amended)** **[An]**The isolated **[ligand-binding domain according to]**polypeptide of Claim **[6]** 1, wherein exon II has a nucleotide sequence according to SEQ ID NO:7.

40 **(Amended)** **[An]**The isolated **[ligand-binding domain]**polypeptide according to Claim **[10]**3, which further comprises an amino acid sequence according to SEQ ID NO:2.

~~41.~~ **(Amended)** **[An]**The isolated **[ligand-binding domain]**polypeptide according to Claim **[10 or Claim 40]**3, which further comprises an amino acid sequence according to SEQ ID NO:3.

Please add the following Claim:

~~44.~~ An isolated nucleic acid which hybridizes with the sequence of nucleotides set forth in SEQ ID NO:5, under high stringency washing conditions of 0.1 xSSC/0.1% SDS for about 15 minutes at 68°C, wherein the isolated nucleic acid encodes a polypeptide excluding the entire extracellular domain of an Eph family receptor tyrosine kinase.

REMARKS

The Specification has been amended to correct minor informalities. Missing page 35 was added. Missing page 35 consisted of the figure legends for Figures 10E-G and Figure 11. A small amount of introductory language was left off of the beginning of the DETAILED DESCRIPTION OF THE INVENTION. Support for the figure legends can be found in the figures as filed as well as the other figure legends for Figure 10. Support for the missing part of the Detailed Description of the invention can be found in the Specification page 38 Example 4 and Figure 2C.